SYSTEMS MANAGEMENT DOMAIN

Last Updated: 11.07.05

DEFINITION	
Name	Systems Management
Description	The Systems Management domain defines the roles, standards, processes, and technologies for monitoring and controlling components of hardware and software within the State's information system infrastructure.
Rationale	In order to proactively support the computing environment and business based processes that depend heavily on information technology within the State of Missouri, it is necessary to manage the capacity, reliability, stability, and accessibility of all computing systems. The State of Missouri is increasingly dependent on complex information systems that span organizational boundaries that must be available around the clock. Systems Management practices improve resource utilization and help mitigate problems by: • monitoring, managing, and measuring operational jobs, tasks, and system, • systems performance tuning and optimization, • ensuring newly deployed solutions under enterprise systems management methodologies and structures, • providing backup and restoration services, and • establishing service delivery mechanisms including the help desk, asset management, and software distribution.
Benefits	Proper systems management provides the opportunity for more efficient processes, more productive staff, and better utilized resources by: • Decreasing the number of reactive support issues. • Identifying under utilized or unused components. • Decreasing time to resolve problems. • Minimizing the negative impact of changes. • Increasing system availability. • Providing the means to satisfy government regulations, privacy concerns and intellectual property issues.

BOUNDARY	
Boundary Limit Statement	This domain includes best practices, software and hardware that assist in the management, coordination, and control of computing and networking resources. It focuses on issues of managing assets, change, system events/status, fault detection/isolation, system availability/recovery, performance measurement and problem reporting.

ASSOCIATED DISCIPLINES	
List Disciplines under this Domain.	Asset Management, Performance Measurement & Capacity Planning, Change/Configuration Management, Help Desk/Incident Management, Business Continuity, System Availability, System Recovery and System Event Management

PRINCIPLES		
Related Enterprise Principles		
Principle	Conflict	Relationship
GP1: Information Technology is an enterprise-wide resource. IT investments will be aligned with the strategic goals of the State of Missouri through planning and architecture processes.	☐	
GP2: State IT systems and Enterprise Architecture will support the State's long-term business, strategies and plans. All development activities will comply with the architecture.	☐	
GP3: The State of Missouri Enterprise Architecture represents a target IT environment for the State. Departments and agencies will converge on the architecture over time, as new applications are built and deployed, and old systems refreshed or retired.	☐	
GP4: All State Information Technology solutions that deliver products and services to stakeholders will comply with the State Enterprise Architecture.	☐	
GP5: Enterprise Architecture is adaptive and must evolve to accommodate changes in business and technology.	☐	
GP6: The CIO, ITAB members, and Domain Chairpersons will provide leadership to the State on the use of technologies to encourage business innovations.	☐	
MP1: Accountability will be established for all IT assets – applications, data and technologies. Accountable individuals will be responsible for the management, administration and usage of these assets.	☐	
MP2: State agencies will adopt an organizational culture that supports architecture.	☐	
TP1: Agencies will develop and implement technology solutions based upon industry standards and proven technologies that are in compliance with the Enterprise Architecture.	☐	
TP2: The state agencies will actively seek opportunities to share and re-use IT assets. Where possible IT organizations will implement common sets of technologies and services.	☐	
TP3: Technology must focus on population demographics and economic issues championed by the policy makers.	☐	
TP4: The State of Missouri will secure critical infrastructure in a way that protects the health, safely, and welfare of the citizens and their interests.	☐	
TP5: The State of Missouri will leverage statewide project and oversight processes as a way of increasing the State's and individual agencies' ability to deliver quality products and services within budget limitations.	☐	
TP6: The State of Missouri IT community will be financially accountable for selecting, deploying, building, and maintaining solutions for the citizens and stakeholders of the enterprise.	☐	
TP7: Metrics will be utilized as a way to measure progress in technology standardization and success in delivering technology solutions.	☐	
TP8: The State of Missouri must develop a seamless, reliable, secure, and "always available" network and infrastructure to support the growing demands of our citizens and constituents.	☐	

TP9: All agencies will follow state architecture practices and adopt technology directions as soon as feasible. The State of Missouri will actively adopt measures to increase reuse, decrease costs, consolidation where appropriate, and retire expensive assets.	☐	

BEST PRACTICES

Related Best Practices

Best Practice	Conflict	Relationship
BP1: Enterprise Architecture must be an in-sourced effort.	☐	
BP2: IT resources should be focused on the agency's mission.	☐	
BP3: The State will use a standard set of proven technologies; the proliferation of technologies will be avoided.	☐	
BP4: Technology selection will consider, in addition to functionality, the ability to support systems management disciplines that are oriented toward centralized management of all technology components.	☐	
BP5: Government of enterprise architecture will be done in a federated way. EA will support common business infrastructure initiatives across semiautonomous business units. Best-practice efforts are focused on centralizing IT governance and defining government-wide federated architectures.	☐	
BP6: The State will balance the needs of privacy and accessibly while ensuring security of personal information and the state's assets.	☐	

TECHNOLOGY TRENDS

Related Technology Trends

Technology Trends	Conflict	Relationship
TT1: Government will still experience a shortfall in obtaining highly skilled, motivated staff due to budget constraints and out-sourcing options.	☐	
TT2: The increasing failure of traditional software development methods and financial and resource constraints, combined with "time-to-market flexibility", is producing fundamentally new techniques for the execution of IT projects.	☐	
TT3: Enterprises are using new technologies to reduce administration costs and establish a unified system management approach for corporate computing.	☐	
TT4: Unified management and governed evolution of the Enterprise Architecture will become a dominant best practice even where asset ownership is federated. Federated architectures will focus on supporting common business infrastructure initiatives across semi-autonomous business units.	☐	
TT5: Tension between citizens' security and right to privacy will become increasingly significant. Securing IT assets and developing a comprehensive security and privacy architecture are required by 80%+ of public-sector CIOs. Privacy/security mandates will require CIOs to re-evaluate existing practices in light of the physical and digital security requirements for federal, state, local, and international government interfaces.	☐	
TT6: Evolution from Vendor Contracting to Vendor Partnerships will evolve.	☐	
TT7: E-Government will slow.	☐	

TT8: A service oriented architecture is emerging due to the enablement of web-services and increased accessibility and usage of all access channels.	☐			
TT9: The portal will be a cost of doing business, with frameworks broaching G2E, G2B, G2G, and G2C requirements and providing content, process automation, integration, development, knowledge, and collaboration management capabilities. Portal frameworks will provide comprehensive facilities for interfaces (personalization, visualization, navigation) and application delivery (e.g., Web services location, development, integration).	☐			

STATE CONTRACTS

Planned Contracts	
Existing Contracts	

CURRENT STATUS

Provide the Current Status	☐ *In Development*	☐ *Under Review*	☒ *Approved*	☐ *Rejected*

AUDIT TRAIL

Creation Date	08/24/05	*Date Approved/Rejected*	11-8-05
Reason for Rejection			
Last Date Reviewed		*Last Date Updated*	
Reason for Update			